

SOV-127-58-9-1C/20

New Data on the Concentration of Iron Ores of the Nizhnyaya Angara Deposits

M.G. Kurochkin, N.S. Kosul'nikova, A.S. Kozhevnikov, S.M. Luk'yanov, V.B. Lutsiyan, V.V. Makarov, D.Ye. Necheporenko, and G.L. Suslikova in 1957-58, they also found the possibility of obtaining much better results of the concentration by the magnetic-roasting method. According to their findings, the optimum degree of reduction of roasted ore is in the 120-150 % range, as compared with 83-102 % findings of the Mekhanobr (Fig. 1). Research on various reducers showed that the best results of reducing were obtained when coal was used as fuel. Its use allowed the necessary degree of reduction to be obtained at a temperature of 650-700°, which must have been much higher when gas was used as a fuel. As the Krasnoyarsk region has huge reserves of brown coal, it was decided to use only the magnetic-roasting method. Brown coal consumption amounted to 8.1 % of the processed ore on the average. The low cost of brown coal makes this method highly profitable. The crushed ore of class minus 12 mm was subjected to the magnetic-roasting process; after that it was divided into two classes of plus 2 mm and minus 2 mm. The ore of class plus 2 mm was then subjected to the dry magnetic separation and the obtained concentration, together with ore of class minus 2 mm,

Card 2/3

SOV-127-58-9-10/20

New Data on the Concentration of Iron Ores of the Nizhnyaya Angara Deposits

was again subjected to wet magnetic separation. Further concentration operations were continued, according to two schemes elaborated by the Mekhanobr Institute (Fig. 2) and the Sibe-
elektrostal' Plant (Fig. 3). Best results were obtained with ores reduced by 120-150 % (Table 3). After testing the obtained concentrates with various iron ores of the Nizhnyaya Angara deposits, the Sibe-
elektrostal' Plant proposed a general method of concentration for all ores of the region. The cost of cast iron obtained from the concentrates (Table 7) of ores of the Nizhnyaya Angara deposits is, after the Magnitogorsk cast iron, the lowest in the Union.

There is 1 graph, 7 tables and 5 schemes.

ASSOCIATION: Krasnoyarskiy zavod Sibe-
elektrostal' Plant (The Krasnoyarsk Sibe-
elektrostal' Plant); Krasnoyarskoye geologicheskoye upravleniye
(The Krasnoyarsk Geological Administration)

1. Iron ores--Processing

Card 3/3

MEDVEDKOV, V.I., inzh.

Use of hydraulic drives for the auxiliary equipment of hydraulic mines. Ugol' 34 no.6:18-20 Je '59. (MIRA 12:8)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Gidroughe'l'.
(Hydraulic mining) (Coal mining machinery--Hydraulic driving)

ZIMELEV, G.V.; MASHCHENKO, A.F.; MEDVEDKOV, V.I.

[Theory of the automobile; a book of problems] Teoriia avtomobilia; zadachnik.
Moskva, Voen. izd-vo, 1952. 155 p. (MIRA 6:8)

(Automobile engineering)

~~MEDVEDKOV, Vladimir Ivanovich~~; STEPANOV, Aleksey Pavlovich; SMELYANSKIY,
V.A., redaktor; MAL'KOVA, N.V., tekhnicheskii redaktor

[Adjusting the ZIL-150 and ZIL-151 automobiles] Regulirovka avtomob-
ilei ZIL-150 i ZIL-151. Moskva, Nauchno-tekhn. izd-vo avtotransp.
lit-ry, 1957. 56 p. (MLBA 10:4)
(Automobiles--Maintenance)

MASHCHENKO, Anatoliy Fedorovich, kandidat tekhnicheskikh nauk, dotsent;
MEDVEDKOV, V.I., kandidat tekhnicheskikh nauk, dotsent; KOSOROTOV,
B.V., inzhener polkovnik, redaktor; SRIBNIS, N.V., tekhnicheskiy
redaktor

[Maintenance of automobiles] Tekhnicheskoe obsluzhivanie avtomobilei.
Moskva, Voen.izd-vo M-va obor. SSSR, 1957. 217 p. (MIRA 10:9)
(Automobiles--Maintenance and repair)

MEDVEDKOV, Vladimir Ivanovich,; LESNYAKOV, F.I., red.; ZUYEVA, N.K., tekhn. red.

[Keeping GAZ trucks in proper operating condition] Regulirovka
gruzovykh avtomobilei GAZ. Moskva, Nauchno-tekhn. izd-vo avtotransp.
lit-ry, 1958. 58 p. (MIRA 11:12)
(Motortrucks--Maintenance and repair)

MEDVEDKOV, Vladimir Ivanovich; STEPANOV, Aleksey Pavlovich; NIKITIN,
A.G., red.; NIKOLAYEVA, L.N., tekhn.red.

[Maintenance of the ZIL-164 and ZIL-157 motortrucks] Regulirovka
avtomobilei ZIL-164 i ZIL-157. Moskva, Nauchno-tekhn.izd-vo
Min-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1960.
63 p. (MIRA 13:12)

(Motortrucks--Maintenance and repair)

MEDVEDKOV, Vladimir Ivanovich; GRINBERG, P.I., red.; GALAKTIONOVA,
Ye.N., tekhn. red.

[Adjustment of GAZ motortrucks] Regulirovka gruzovykh avtomob-
ilei GAZ. Izd.2., perer. Moskva, Avtotransizdat, 1962. 69 p.
(MIRA 15:7)
(Motortrucks—Maintenance and repair)

MEDVEDKOV, V.I., inzh.

Hydraulic turbine in machines for underground hydraulic mining.
Trudy VNIIGidrouglia no.1:101-116 '62. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy
institut dobychi uglya gidravlicheskim sposobom.

MEDVEDKOV, V.I., inzh.

Determining the rated opening of the distributor of a hydraulic turbine with bucket blades. Trudy VNIIGidromagla no.3:138-146
'63 (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektirovannyy -
torskij institut dobychi uglya gidravlicheskim sposobom.

MEDVEDKOV, Yuriy Sergeyevich; MORDVINOV, V.V., red.; VASIL'YEVA,
G.N., red.izd-va; PAVLOVSKIY, A.A., tekhn. red.

[Foreign trade of the German Federal Republic] Vneshniaia
torgovlia Federativnoi Respubliki Germanii. Moskva, Vnesh-
torgizdat, 1963. 190 p. (MIRA 16:7)
(Germany, West--Commerce)

MEI VEDKOV, Yu. V.

"The Pacific Northwest of the US" Cand Geog Sci, Inst of Geography, Acad USSR,
Moscow, Oct-Dec 1953. Dissertation (Vestnik Akademii Nauk Moscow, Feb 54)

SO: SUM 186, 19 Aug 1954

MEDVEDKOV, Yu.; GORDONOV, L.; TIKHOMIROV, V.P., otvetstvennyy redaktor;
KOSTINSKIY, D.N., redaktor; NOGINA, N.I., tekhnicheskiy redaktor

[Angola, Bachuanaland, Rhodesia and N'iasaland] Angola, Bechuanaland,
Federatsiia Rodezii i N'iasalenda. Moskva, Gos. izd-vo geogr. lit-ry
1956. 31 p. (MLBA 9:9)
(Africa--Geography)

11 MEDVEDKOV, Yu.V.
GOKHMAN, V.M.; MEDVEDKOV, Yu.V.

Fundamental characteristics of the structure and distribution of
industry in the Pacific Northwest of the U.S.A. Trudy Inst.geog.
no.70:236-301 '56. (MLRA 10:1)
(Northwest Pacific--Industries)

MEDVEDKOV Yu. V.

AUTHOR: I.P.

10-58-3-27/29

TITLE: **Journal of Abstracts** "Geografiya" (Referativnyy zhurnal
"Geograriya")

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geograficheskaya, 1958,
Nr 3, page 158 (USSR)

ABSTRACT: The journal "Geografiya" is going to publish special booklets describing different parts of the USSR, Canada and Japan. Another publication will deal with the shipbuilding areas of the world. In 1956/57 the journal had already published the following booklets: "Ferrous Metallurgy in the Leading Capitalistic Countries and Their Raw Material Resources" by M.S. Rozin and Yu.V. Medvedkov; "Power Engineering in Capitalistic Countries" by O.V. Vitkovskiy; "Economic Resources in India and Their Utilization" by F.D. Yaroshenko; and others.

AVAILABLE: Library of Congress

Card 1/1

1. Periodicals - "Geografiya" - USSR

MEDVEDKOV, Yu.V., kand.geogr.nauk; ROZIN, M.S., kand.ekon.nauk;
ZHUKOVSKAYA, V.M.; KUROPYATNIK, R.P., kand.geogr.nauk;
POKSHISHEVSKIY, V.V., prof., red.; GAVRIN, P.N., tekhn.red.

[Canada; present-day condition and new features of the
economic geography] Kanada; sovremennoe sostoianie i novye
cherty geografii khoziaiatva. Pod red. V.V.Pokshishhevskogo.
Moskva, Vses.in-t nauchn. i tekhn.informatsii, 1959. 93 p.
(MIRA 13:2)

(Canada--Economic conditions)

MEDVEDKOV, Yuriy Vladimirovich; LIPETS, Yu.G., red.; POPOVA, V.I.,
mladshiy red.; KISELEVA, Z.A., red.kart; KOSHELEVA, S.M.,
tekhn.red.

[Basutoland, Swaziland and Bechuanaland] Basutolend, Svazilend,
Bechuanalend. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 54 p.
(MIRA 14:1)

(Basutoland) (Swaziland) (Bechuanaland)

KREMEN', K.S.; LIPETS, Yu.G.; MAKAROV, Yu.S.; MEDVEDKOV, Yu.V.;
OLEYNIKOV, I.N.; CHIZHOV, N.N.; VORONINA, L.M., red.;
ZABIROV, B.Sh., red.; NASHAYEVA, E.A., tekhn. red.

[Equatorial and Southern Africa; 1:5 000 000] Ekvatorial'naia
i Iuzhnaia Afrika; 1:5 000 000. Moskva, Gos.izd-vo geogr.lit-ry
1961. 1 fold. map. ____ Text. 56 p. (MIRA 15:1)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii.
(Africa--Economic geography--Maps)

KREMEN', K.S.; LIFETS, Yu.G.; MAKAROV, Yu.S.; MEDVEDKOV, Yu.V.;
OLEYNIKOV, I.N.; CHIZHOV, N.N.; ZABIROV, B.Sh., red.;
KOSTINSKIY, D.N., red.; ZHURAVLEVA, G.P., mladshiy red.;
GOLITSYN, A.V., red. kart; BURLAKA, N.P., tekhn. red.

[Countries of Central and South Africa; geographical information]
Strany Tsentral'noi i Iuzhnoi Afriki; geograficheskie
spravki. Moskva, Geografiz, 1962. 61 p. (MIRA 15:7)

(Africa, Central--Geography, Economic)

(Africa, South--Geography, Economic)

VITKOVSKIY, O.V., kand. geogr. nauk, red.; MEDVEDEV, Yu.V., kand.
geogr. nauk, red.; SAVIN, M.A., kand. biol. nauk, red.
SAMYLYNA, S.I., tekhn. red.

[Collection of articles on geography] Geograficheskii sbor-
nik. Moskva, Proizvodstvenno-izdatel'skii kombinat VINITI,
1963. 242 p. (MIRA 16:4)

1. Akademiya nauk SSSR. Institut nauchnoy informatsii.
(Geography)

MEDVEDKOV, Yu.V.

Cyclicality of the flow of scientific information and the
activity of the All-Union Institute of Scientific and
Technical Information. NTI no.1:7-10 '63. (MIRA 16:8)

MEDVEDKOV, Yu.V.

[Economic geography study of the regions of the capitalist world] Ekonomgeograficheskaja izuchennost' raionov kapitalisticheskogo mira. Moskva, In-t nauchnoi informatsii. (MIRA 18:2)
No.1. 1964. 81 p.

MEDVEDKOVA, A. A.

"The Problems of Pathogenesis and Immunology in Experimental Lymphocytic Choriomeningitis." Cand Med Sci, Inst of Experimental Medicine, Acad Med Sci USSR, Leningrad, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

MENDEL'SON, A. I. and MEDVEDKOVA, A. A.

Material on the Serological Characteristics of the Salmonella Heidelberg
Bacillus

Among the typhoid-paratyphoid cultures, most of which belonged to the serologic group B, isolated from patients, the Heidelberg bacilli were the main ones. In the Heidelberg cultures preserved under laboratory conditions for a long time and freshly isolated cultures there were observed significant differences; they did not keep their serologic characteristics; the N-antigen of these cultures changed significantly. (RZhBiol, No. 7, 1955)
Tr. In-ta Epidemiol. Mikrobiol. i Gigiyeny, 15, 1953, 161-168.

SO: Sum, No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific
Abstracts (17)

BYSTROVA, V.V.; DOBROMYSLOV, V.V.; YELINOV, N.P.; ZAIKINA, N.A.; KONDRAT'YEVA,
A.A.; MEDVEDKOVA, A.A.; SILUYANOVA, N.A.; PROLOVA, M.A.

Study of the antifungal properties and chemotherapeutic activity of
antibiotic 26/1. Eksp. i klin. issl. po antibiot. 2:289-295 '60.
(MIRA 15:5)

(ANTIBIOTICS)

MARGOLIN, A.M.; ANISIMOVA, N.A.; MEDVEDKOVA, A.A.; OVSIANNIKOVA
(Leningrad)

Use of nystatin in clinical internal diseases. Klin.med. 39
no.3:71-74 Mr '61. (MIRA 14:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta anti-
biotikov (dir. - dotsent A.V. Loginov).
(NYSTATIN)

MARGOLIN, A.M., kand. med. nauk; MEDVEDKOVA, A.A., kand. med. nauk;
OVSYANNIKOVA, N.P., mladshiy nauchnyy sotrudnik.

Significance of Candida in the antibiotic treatment of chronic
inflammation of the biliary tract. Kaz. med. zhur. no.5:15-17
S-0'63 (MIRA 16:12)

1. Terapevticheskaya klinika (zav - A.M.Margolin) i mikolo-
gicheskaya laboratoriya Leningradskogo nauchno-issledovatel'-
skogo instituta antibiotikov (nauchnyy rukovoditel' - prof.
A.V. Markovich).

VOL'F, L.A.; MARKOVICH, G.V.; MEDVEDKOVA, A.A.

Antifungal action of synthetic fibers containing specific
chemical groups. Vest. dermat. i ven. 37 no.6:39-41 June '63.
(Bib. 17:6)

1. Nauchno-issledovatel'skiy institut antibiotikov Ministerstva
zdravookhraneniya RSFSR i kafedra khimicheskikh volokon Leningrad-
skogo tekstil'nogo instituta imeni S.M. Kirova.

MARKOVICH, A. V.; SOKOLOV, B. V.; MEDVEDKOVA, A. A.; PAYKIN, M. D.; FROLOVA, M. A.;
IL'IN, G. I.

"Therapy of experimental coccal infections by soluble tetracycline derivatives and
by tetracycline."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Sci Res Inst of Antibiotics, Leningrad.

MARKOVICH, A.V.; SOKOLOV, B.V.; MEDVEDKOVA, A.A.; PAYKIN, M.D.;
FROLOVA, M.A.

Effectiveness of N-morpholynemethyltetracycline chemotherapy
in experimental infections with coccal bacteria. Antibiotiki
9 no.4:343-347 Ap '64. (MIRA 19:1)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov.

DOBROMYSLOV, V.V.; MEDVEDKOVA, A.A.; FROLOVA, M.A.

Characteristics of the development of dermatophytes on chick
embryos. Zhur. mikrobiol., epid. i immun. 41 no.4:131-135
Ap '64. (MIRA 18:4)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov
Ministerstva zdravookhraneniya RSFSR.

CHAMOKOVA, Ye.F.; MEDVEDKOVA, A.I.; GRIGOR'YEVA, M.K.

Functional state of certain internal organs in tuberculous
meningitis. *Pediatrics* 37 no.4:75 Ap '59. (MIRA 12:6)
(MENINGES--TUBERCULOSIS) (VISCERA)

MEDVEDKOVA, A.I.

Producing experimental sugar diabetes in dogs in chronic acidosis
conditions. Zdrav. Belor. 5 no.11:42-43 H '59. (MIRA 13:3)

1. Iz kafedry biokhimii Smolenskogo meditsinskogo instituta (zave-
duyushchiy kafedroy - prof. V.I. Panisya).
(DIABETES) (ACIDOSIS)

MEDVEDKOVA, E. (Chernovtsy (USSR))

Scientific conference of the economic geographers. Vop. ekon. no.7:
159-160 JI '59. (MIR 12:11)
(Russia--Economic conditions)

DUDKEVICH, G.A., dotsent; MEDVEDKOVA, M.M., assistant

Primary and secondary localization of echinococcosis in the female genitalia. Akush.i gin. 35 no.5:104 S-O '59. (MIRA 13:2)

1. Iz kafedry akusherstva i ginekologii (zaveduyushchiy - prof. Ye. K. Aleksandrov) i kafedry obshchey khirurgii (zaveduyushchiy - dotsent G.A. Dudkevich) Yaroslavskogo meditsinskogo instituta.
(GENITALIA, FEMALE, diseases)
(ECHINOCOCCOSIS)

MEDVEDKOVA, M. M., assistant

Problems in the prevention of repeated extrauterine pregnancy.
Akush. i gin. no.2:76-80 '62. (MIRA 15:6)

1. Iz akushersko-ginekologicheskoy kliniki (zav. kafedroy -
prof. Ye. K. Aleksandrov) Yaroslavskogo meditsinskogo instituta.

(PREGNANCY, EXTRA-UTERINE)

MEDVEDKOVA, M.M., assistant

Reinfusion of blood in interrupted ectopic pregnancy. Sbor.
nauch. trud. Ivan. gos. med. inst. no. 28:255-257 '63.
(MIRA 19:1)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. Ye.K.
Aleksandrov) Yaroslavskogo meditsinskogo instituta (rektor -
prof. N. Ye. Yarygin).

MADEVICH, Aleksey Zinov'yevich; MIKHAILIK, Viktor Arkadyevich;
Prinimali uchastiye: KRIVOKH, N.G., sestra-anestezist;
MEDVEDKOVA, N.Ye., sestra-anestezist; MEDVEDKIN, G.I.,
red.

[Fundamentals of anesthesia; manual for nurse-anesthetists;
vy narkoza; posobie dlia sester-anestezistov. Pri ucha-
stii sester-anestezistov N.G.Krivokh i N.E.Medvedkov.
Moskva, Meditsina, 1964. 160 p. (Mir 1964)]

1. MEDVEDNIKOV, G.
2. USSR (600)
4. Labor and Laboring Classes - Medical Care
7. Authority is won through work, V pom. profaktivu, 14, no. 9, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

MEDVEDNIKOV, G., tekhn. inspektor

After a public survey. Okhr. truda i sots. strakh. no. 2:72
Fe '59. (MIRA 12:4)

(Dnepropetrovsk--Industrial hygiene)

MEDVEDNIKOV, G.F. (g. Dnepropetrovsk)

Improve work safety of electric welding operators. Bezop.truda
v prom. 5 no. 7:32 J1 '61. (MIRA 14:6)
(Electric welding---Safety measures)

MEDVEDNIKOV, G.F.

Lubrication of open-hearth ingot molds with bitumen no. 4-5.
Metallurg 7 no.2:27 F '62. (MIRA 15:3)

1. Tekhnicheskii inspektor Dnepropetrovskogo oblastnogo soveta
profsoyuzov.

(Ingot molds) (Bitumen)

PIVKO, G.M.; ARKHIPOV, P.S. [deceased]; MEDVEDNIKOV, M.N., inzh.,
retsenzent; USTIMENKO, P.I., inzh., retsenzent; KHODOROV,
L.R., inzh., retsenzent; NOVIKAS, M.N., inzh., red.;
KHITROV, P.A., tekhn. red.

[Manual on railroad wire communication equipment] Spravochnik
po apparature transportnoi provodnoi svyazi. Moskva, Trans-
zheldorizdat, 1963. 359 p. (MIRA 16:7)
(Railroads—Communication systems)

KUKHARKINA, S.A.; MEDVEDNIKOV, V.A.

New-weave castor of lightweight, semi-coarse wool. Tekst.prom. 16
no.12:24-27 D'56. (MLRA 10:1)

(Woolen and worsted manufacture)

MEDVEDNIKOV, V.A.

Methods for determining the height, evenness, and density of flat
nap. Tekst. prom. 18 no.2:50-52 F '58. (MIRA 13:3)
(Woolen and worsted manufacture)

MEDVEDNIKOV, V.A.

Scientific and technical conference on problems of wool spinning.
Tekst.prom. 18 no.10:66-68 0 '58. (MIRA 11:11)

1. Glavnyy spetsialist Gosudarstvennogo nauchno-tekhnicheskogo
komiteta Soveta Ministrov RSFSR.
(Woolen and worsted spinning)

MEDVEDNIKOV, V.A.; SEDINKIN, V.G.

Pipe sprayers are better than tank sprayers. Tekst.prom. 19
no.10:78-79 0 '59. (MIRA 13:1)

1. Glavnyy inzhener fabriki imeni P.Aleksyeva (for Medvednikov).
2. Zam.nachal'nika otdelochnogo proizvodstva Kupavinskoy
tonkosukonnoy fabriki (for Sedinkin).
(Woolen and worsted manufacture--Equipment and supplies)

KAZ'MIN, F.P.; MEDVEDNIKOV, V.A.

Experience in the operation of the USVM-1 blender. Tekst.prom. 20
no.9:71-74 S '60. (MIRA 13:10)

1. Direktor fabriki imeni Petra Aleksyeva (for Kaz'min).
2. Glavnyy inzhener fabriki imeni Petra Aleksyeva (for Medvednikov).
(Woolen and worsted manufacture--Equipment and supplies)

Medvednikova, V. Ya.

AUTHORS: Kuleshov, P. Ya. and Medvednikova, V. Ya.

68-5-9/14

TITLE: The determination of the tar content in coke oven gas.
(Opredeleniye soderzhaniya smoly v koksovom gaze).

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No. 5,
pp. 42-44 (U.S.S.R.)

ABSTRACT: Methods of determining tar content in coke oven gas are briefly reviewed. The correct method of collecting gas samples for the determination is described in some detail.

There is 1 table, 4 figures and 3 Slavic references.

ASSOCIATION: Zaporozhe Coke Oven Works (Zaporozhskiy Koksokhimi-cheskiy Zavod).

AVAILABLE:

Card 1/1

MEDVEDOVSKAYA, B.I., inzh.; SHASTINA, Ye.A., inzh.; GORDON, Ye.Yu., inzh.;
PROTSSENKO, I.Ye., inzh.; LITVINOV, V.P., inzh.; SHISHKINA, E.I.,
inzh.; POPOVA, N.E., otv.red.; SALITAN, L.S., red.; KARABILOVA,
S.F., tekhn.red.

[Handbook for the certification of multiplexing channels in domestic
cable and overhead line communication systems] Rukovodstvo po paspor-
tizatsii kanalov otechestvennykh sistem uplotneniia vozdushnykh i
kabel'nykh liniy svyazi. Moskva, Gos.izd-vo lit-ry po voprosam
svyazi i radio, 1960. 261 p. (MIRA 13:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye mezhdugorodnoy
telefonno-telegrafnoy svyazi.
(Telecommunication)

VORONKOV, G.N., kand.tekhn.nauk; MEDVEDOVSKAYA, E.I.

Decomposition of zirconium in the presence of CaCO_3 . Trudy GIZKI

no.2:109-113 '57.

(MIRA 11:7)

(Zirconium) (Calcium carbonate)

VALEYEV, Kh.S., kand.tekhn.nauk; MEDVEDOVSKAYA, E.I., inzh.; NOTKINA, S.D.,
inzh.

Synthesis of zinc stannates. Trudy GIEKI no.4:80-86 '60.
(MIRA 15:1)
(Zinc stannate)

L 44802-55 EWP(s)/EPA(s)-2/EWT(m)/EWP(i)/EPT(n)-2/EPA(w)-2/EWP(b) Pub-10/
Pt-7/Pu-4 WH

ACCESSION NR: AP5012033

UR/0072/65/000/005/0022/0024

AUTHOR: Zin'ko, E.I. (Candidate of technical sciences); Medvedovskaya, E. I. (Engineer); Fomina, N. P. (Candidate of technical sciences)

TITLE: Ceramic materials with a low temperature coefficient of linear expansion

SOURCE: Steklo i keramika, no. 5, 1966, 22-24

TOPIC TAGS: ceramic, linear expansion coefficient, thermal stability, kaolin, quartz sand, lithium aluminosilicate, eucryptite, petalite, spodumene

ABSTRACT: Results are given of a study of the properties and phase-mineralogical composition of ceramic materials whose crystalline phase consists of lithium aluminosilicates. The latter were synthesized from chemically pure lithium carbonate and natural raw

8.00% Li_2O). The ceramics had a low temperature coefficient of linear expansion; the

Card 1/2

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ACCESSION NR: AP5012033

lowest value (-0.56×10^{-6} at 20-100C) was displayed by the spodumene-base material LS-9, from which products can be molded by methods used in plastics technology. Orig. art. has: 1 figure.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy elektrokeramicheskiy institut
(State Scientific Research Institute for Electroceramics)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 001

OTHER: 003

MEDVED'EVSKAYA, N.D., Gorn Med Sci -- (diss) "Treatment
of patients with surgical ~~sepsis~~ sepsis. (According to
data of the hospital surgical clinic)." Kazan', 1957,
14 pp (Kazan' State Med Inst) (FL, 23-6. 1:2)

- 141 -

SHISHKINA, A.I., assistant; MEDVEDOVSKAYA, G.D.

Clinical aspects of obliterating atherosclerosis of the vessels
of the extremities. Kaz.med.zhur. no.3:14-15 My-Je '62.

(MIRA 15:9)

1. Klinika gosspital'noy khirurgii No.1 (zav. - prof. N.V.Sokolov)
Kazanskogo meditsinskogo instituta.

(EXTREMITIES (ANATOMY)—BLOOD SUPPLY) (ARTERIOSCLEROSIS)

EXCERPTA MEDICA SEC. 12 Vol. 12/8 Ophth. Aug. 58

med 1412. CLINIC AND PATHOGENESIS OF TRAUMATIC CYSTS OF THE IRIS (Russian text) - Medvedovskaya T. P. - OFTALM. ZH. 1956, 4 (210-214)
Three cases of traumatic iridial cysts have been observed which were very different in their clinical picture and origin. In a case of a serous iridial cyst the author regarded an operation - a cataract extraction - as the traumatic factor. In a case of a migratory serous cyst a perforating injury of the limbar portion had been sustained. In a case of a pearl cyst of the iris with cilia on the anterior capsule of the crystalline lens there was a perforating corneal injury. The observed cases support the opinion of the majority of authors that trauma has great significance in the pathogenesis of serous cysts of the iris, in that fragments of conjunctival or limbal epithelium are implanted through the wound into the tissue of the iris. The pearl cysts develop when epithelial cells from epidermis, and cornified cells from sheaths and hair follicles, cornea and conjunctiva, following trauma are implanted into the iris and continue to grow.

(S)

MEDVEDOVSKAYA, IS.P.: LIKHTAREV, I.A.

Some characteristics of ionization and distribution of radon in
the eye tissue of rats. Med. rad. 8 no.11:11-12, 1963 (17:12)

1. Iz Kiyevskogo instituta gigiyeny truda i professional'nykh
zabolevaniy (direktor - prof. L.I. Medved').

MEDVEDOVSKAYA, TS.P. nauchnyy sotrudnik

Ophthalmological and pathohistological changes in the crystalline lens of rabbits under the influence of incorporated radioactive phosphorus applied in quantities almost equaling human therapeutic doses. Oft. zhur. 18 no. 7:432-435 '63 (MIRA 17:4)

1. Iz Kiyevskogo instituta gigiyeny truda i professional'nykh zabolevaniy.

L 54640-65

ACCESSION NR: AP5010340

OR/0205/65/005/002/0213/0217

AUTHOR: Medvedovskaya, Ts. P.; Likhtarev, I. A.

TITLE: The accumulation of incorporated radioactive phosphorus in eye tissues and its elimination

SOURCE: Radiobiologiya, v. 5, no. 2, 1965, 213-217

TOPIC TAGS: animal, rabbit, phosphorus-32, eye, tissue, half life, radioactivity measurement, exponential equation, radiobiological parameter

ABSTRACT: The nature of phosphorus-32 distribution in eye tissues following single dose administration was investigated to determine the radiobiological parameters and to formulate empirical equations for elimination processes as a function of

the radiobiological parameters and to formulate empirical equations describing the accumulation-elimination processes as a function of time. In experiments on 21 rabbits weighing 2.2 ± 0.3 kg, a single P^{32} dose with a concentration of 250 microcuries/kg was introduced subcutaneously. Animals were killed by air embolism over a period of 1 to 60 days. Radioactivity of eye tissues was measured by a B-2 unit with a MST-17 counter. On the basis of P^{32} radioactivity

Card 1/3

L 54640-65
ACCESSION NR: AP5010340

findings for the eye tissues, a composite exponential model was selected for equations describing the accumulation-elimination processes in the cornea, aqueous chamber, vitreous body, iris and ciliary body, crystalline lens, the sclera+choroid+retina membrane,

days. Orig. art. has: 2 tables, 1 figure, and 0 formulas.

ASSOCIATION: Institut gigiyeny i profzabolevaniy, Kiev (Institute of Hygiene and Occupational Diseases)

Card 2/3

L 54640-65

ACCESSION NR: AP5010340

SUBMITTED: 25May63

ENCL: 00

SUB CODE: LB

NR REF SOV: 002

OTHER: 000

Card 3/3

L 3201-66

ACCESSION NR: AP5009200

S/0241/65/010/003/0057/0060

AUTHOR: Medvedovskaya, T. P.

TITLE: Phosphorus³² distribution in rabbit eye tissues following multiple dose administration

SOURCE: Meditsinskaya radiologiya, v. 10, no. 3, 1965, 57-60

TOPIC TAGS: rabbit, phosphorus 32, eye, tissue, radioisotope, effective half life, dosage

ABSTRACT: In experiments on 26 rabbits P³² distribution in eye tissues was investigated after prolonged administration of the isotope and results were compared with literature data for single dose administration. Experimental animals weighing 2.2±0.3 kg received P³² subcutaneously in daily doses of 1 microcurie/kg for periods up to 17 mos. Animals were killed at periods ranging from 4 days to 17 mos after P³² was first introduced. P³² concentration and elimination from the various eye tissues were measured by direct radiometry of eye tissue suspensions. The dynamics of P³² distribution was expressed by curves showing concentration changes. With

Card 1/3

L 3201-66

ACCESSION NR: AP5009200

repeated administration 0.01% of the daily dose was found in the eyeball during the equilibrium period. The equilibrium concentrations of P32 for all the eye tissues did not differ much from one another (0.002-0.003 microcurie/g). A slightly higher equilibrium concentration (0.005 microcurie/g) was found for the iris and for the ciliary body. The equilibrium period is attained in the cornea by the 20th to 30th day, in the iris and ciliary body by the 30th to 45th day, and in the crystalline lens by the 45th to 60th day. In comparing P32 distribution data for single dose (250 microcuries/kg), the same concentration (.01 microcurie/kg) was found in the eyeball as for daily administration. Approximately 36% of the P32 is eliminated from the eye tissues during the effective half life period (30 hrs) and the remaining P32 is eliminated in 10 days. P32 distribution in the eye tissues is more uniform with daily dose administration than with a single dose, except for distribution in the crystalline lens which is not uniform in either case. No significant differences were found in P32 concentration indices for the eye or its separate tissues with single or multiple dose administration. Orig. art. has: 3 tables and 2 figures.

Card 2/3

L 3201-66

ACCESSION NR: AP5009200

ASSOCIATION: Kiyevskiy nauchno-issledovatel'skiy institut
gigiyeny truda i profzabolevaniy (Kiev Scientific-Research Institute
of Industrial Hygiene and Occupational Diseases)

SUBMITTED: 19Apr64

ENCL: 00

SUB CODE: LS

NR REF SOV: 009

OTHER: 006


Card 3/3

MEDVEDOVSKIY, A.A.

Determination of lead in a solution of basic lead acetate. Ukrain. Khim.
Zhur. 16. 530-5 '50. (MLBA 6:4)
(GA 47 no.21:11071 '53)

MEDVEDOVSKIY, A.A.

Adsorptive titration of sulfates. Ukr.khim.zhur.17 no.1:27-35 '51.
(Sulfates) (Titration) (MLRA 9:9)

MEDVEDOVSKIY, A.A.

Preparation and certain properties of mercury-oxide compounds with acetene and their use in the development of a method for quantitative determination of mercury. Ukr.khim.zhur.17 no.1:36-42 '51. (MLBA 9:9)
(Mercury) (Acetene)

MEDVEDOVSKIY, A.A. (Kiyev)

Determining the specific gravity of ethyl chloride in ampuls.
Apt.delo 4 no.2:46-48 Mr-Ap '55. (MLRA 8:5)
(ETHYL CHLORIDE, determination,
of specific gravity in ampuls)

MEDVEDOVSKIY, A.A., (KIYEV)

Improvement in the method of analyzing Wilkinson's ointment.

Apt. delo. 4 no.6:35-36 N-D '55.

(MLBA 9:1)

(OINTMENTS,

Wilkinson's ointment, analysis)

MEDVEDOVSKIY A.A.

✓ Determination of mercuric chloride and sodium chloride in tablets. A. A. Medvedovskii. *Apteknos Delo* 5, No. 4, 44-8(1956).—One g. of HgCl_2 present in 1 or 2 tablets is dissolved in H_2O to make 100 cc. Some of the soln. is transferred to a buret and run slowly into a mixt. of 10 cc. of 0.1N NaOH , 5 cc. of Me_2CO , and 5 drops of thymolphthalein, until the blue color fades. The same amt. of 0.1N NaOH and Me_2CO is titrated with 0.1N HCl . NaCl is detd. by titrating the neutralized soln. with 0.1N AgNO_3 . Since the

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point when 1.0 ml (20%) is used, a 1% soln. of aminopyrine ;
is used, A. S. Mirkin

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001033310016-3"

MEDVEDOVSKIY, A.A.

~~Quantitative~~ determination of mercury in mercusal without mineralization
Apt.delo 7 no.6:58-61 N-D '58 (MIRA 11:12)
(MERCURY---ANALYSIS)

MEDEVEDOVSKIY, A.A. (Kiyev)

Determination of moisture in some pharmaceutical preparations.
Apt.delo 8 no.4:50-55 J1-Ag '59. (MIRA 12:10)
(DRUGS--ADULTERATION AND ANALYSIS)

MEDVEDOVSKIY, A.K.

Seed quality. Zemledelie 25 no.8:68-69 Ag '63. (MIRA 16:10)

1. Zamestitel' predsedatelya Cherkasskogo oblastnogo ispolnitel'-
nogo komiteta.

(Bukovina--Field crops) (Seeds--Grading)

MEDVEDOVSKIY, A.Z.

So-called epicondylitis. Khirurgia no.4:79 Ap '54. (MLBA 7:6)
(HUMERUS, diseases,
*epidendylitis)

MEDVEDOVSKIY, A.Z.

MEDVEDOVSKIY, A.Z.

Determination of crepitation in fracture on the terminal phalanges
of the toe. Ortop., travm. i protez. no.3:50 My-Je '55 (MLRA 8:10)

1. Iz bol'nitsy im. S.P.Botkina (glavnyy vrach--prof. A.N.Shabanov)
i kafedry travmatologii i ortopedii (zav.prof. D.K.Yazykov)
Tsentral'nogo instituta usovershenstvovaniya vrachey.

(TOES, fractures,

diag., crepitation symptom)

(FRACTURES

toes, diag., crepitation symptom)

BABAYAN, M.A.; MEDVEDOVSKIY, D.S.

Following the initiative of the Voskresensk Chemical Combine.
Kauch. i rez. 21 no. 7:57-58 JI '62. (MIRA 15:7)
(Erivan—Tires, Rubber) (Leningrad—Tires, Rubber)

EXCERPTA MEDICA Sec.11 Vol.10/6 Oto-Rhino-Laryngo Jun57
MEDVEDOVSKIYM S.

1088. MEDVEDOVSKIYM, S. Med. Inst. I. P. Pavlov, Leningrad. * The

1088

electrophysiological method of testing the olfactory analyser (Russian text) SBORNIK. VOP. KLIN. FIZ. VOTO-RINO-LARING. 1955 (91-98) Illus. 6

The bioelectrical activity of the cerebral cortex was examined in 57 persons with the simultaneous stimulation of the olfactory analyser. Twenty-seven persons examined suffered from various lesions of the nose and air sinuses. Threshold stimuli (4-6 ml. of air containing an aromatic substance) produced depression of the α -wave. The inhibiting action of this stimulation on the α -waves in persons with normal smell lasted for 30-60 sec. The latent period was of 1-2-seconds' duration. In cases of impaired sense of smell there was prolongation of the latent period to 2-2.5 sec. In diseases accompanied by complete loss of smell, the sniffing of the aromatic substance did not produce any change in the bioelectrical activity of the cerebral cortex. There was no difference in the reaction of the cerebral cortex to the different kinds of smells.

Kublanova - Moscow

MEDVEDOVSKIY, M.S., Doc Med Sci -- (diss) "The human
olfactory analy^{ze}or in the normal and pathological state."

Len 1958, 15 pp (First Len Med Inst im Academician I.P.

Pavlov. State Sci Res Pediatrics Inst) 200 copies

(KL, 28-58, 109)

- 70 -

MEDVEDOVSKIY, M.S., dots. (Leningrad)

Smell. Zdorov'e 5 no.8:9-10 Ag '59.
(SMELL)

(MIRA 13:8)

MEDVEDOVSKIY, M.S., dotsent

Study of the function of the olfactory analyzer by means of
conditioned salivary reflexes. Vest.otorin. 21 no.3:74-79
My-Je '59. (MIRA 12:9)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - chlen-
korrespondent AMN SSSR prof.V.F.Undrita) i Leningradskogo
meditsinskogo instituta i iz laboratorii po izucheniyu
vysshey nervnoy deyatel'nosti (zav. - deystvitel'nyy chlen
AMN SSSR prof.N.I.Krasnogorskiy) Gosudarstvennogo nauchno-
issledovatel'skogo pediatricheskogo instituta.

(SMELL

olfactory analyzer, determ. of funct.with
method of conditioned salivary reflexes (Rus))

(SALIVARY GLANDS, physiol.

conditioned salivary reflexes in study of
funct. of olfactory analyzer (Rus))

MEDVEDOVSKIY, M.S., prof.

Problems of the pathology of the olfactory analyzer in diseases
of the central nervous system. Zhur.ush., nos. i gorl. bol. 24
no.5:54-58 S-O '64. (MIRA 18:3)

1. Otorinolaringologicheskaya kafedra Ivano-Frankovskogo meditsin-
skogo instituta.

MEDVEDOVSKIY, O. (Syktyvkar, Komi ASSR); FADEYEVA, S. (Kiyev); ZINGER, G. (Kiyev);
BORSHCHEVSKIY, Ye. (Moskovskaya obl.); ARONOV, I.; PRUDEYEV, B. (Chita)

From the mailbox. Mest.prom. i khud. promys. 3 no. 1:37 Ja '63.

(MIRA 1962)

1. Sotrudniki Nauchno-issledovatel'skogo instituta mestnoy i
toplivnoy promyshlennosti Gosplana UkrSSR (for Fadeyeva, Zinger).
(Manufactures)

DOLIN, P.I.; LOSEV, V.V.; LUKOVITSEV, P.D.; MEDVEDOVSKIY, P.D.

Letter to the Editor. *Usp.khim.* 22 no.6:775-776 Je '53. (MLBA 6:5)
(Electrochemistry--History)

MEDVEDOVSKIY, V.

Kislород [Oxygen]. Moskva, Detgiz, 1953.

SO: Monthly List of Russian Accessions, Vol. 7, No. 3, June 1954.

MEDVEDOVSKIY, V.I.

5

✓ The measurement of the oxidation-reduction potential of systems during radiation, V. I. Medvedevskiy, N. A. Ilukh, and E. V. Zhuravskaya, *Sbornik Rabot Radiatsionnoi Khim., Akad. Nauk S.S.S.R.* 1955, 71-8. An app. is described for the measurement of the potential of solns. irradiated by Röntgen tubes at 70 kv. and 100 ma. with beam vertically upward. A looped Pt-wire electrode (1 mm. in diam.) was rotated (60-3000 r.p.m.). The power (measured by the ferrous sulfate dosimetric method) was 2.7×10^{16} e.v./cc.-sec. Solns. of 0.8N H_2SO_4 contg. 0.0×10^{-3} moles/l. Fe^{++} , and 0.012×10^{-3} moles/l. Fe^{+++} were irradiated, and the potential of the system followed until the Fe^{++} concn. was 0.13×10^{-3} moles/l. and the Fe^{+++} concn. was 5.95×10^{-3} moles/l. In all cases, the measured potential agreed closely with the standard (unirradiated) solns. of corresponding concn., and appeared to be a function primarily of the ratio $[Fe^{+++}]/[Fe^{++}]$. These results were duplicated with 0.8N $HClO_4$. In the case of HNO_3 , this relation no longer held because of the effect of radiation on the NO_2^- ion. C. H. F.

CPX

AM

MEDVEDOVSKIY, Vladimir Isayevich; KAMZOLKIN, V.P., otvetstvennyy redaktor;
PURNAL', A.P., redaktor izdatel'stva; MAKUNI, Ye.V., tekhnicheskij
redaktor

[Nitrogen] Azot. Moskva, Izd-vo Akademii nauk SSSR, 1957. 165 p.
(Nitrogen) (MLRA 10:3)

BAKH, N. A., MEDVEDOVSKIY, V. I., REVINA, A. A. and BITYUKOV, V. D.

"Radiation-chemical Transformations in Nitrate Solutions" p.45

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow,
Izd-vo AN SSSR, 1958. 330pp.
Conference -25-30 March 1957, Moscow

MEDVEDOVSKIY, V. I.

"The Simultaneous Polarographic Determination of the Concentration of Oxygen and Hydrogen Peroxide Formed During Irradiation" p. 82

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow,
Izd-vo AN SSSR, 1958. 330pp.
Conference -25-30 March 1957, Moscow

MEDVEDOVSKIY, V.I.

AUTHORS: Popov, M. I., Medvedovskiy, V. I., Bakh, N. A. 89-2-7/35

TITLE: The Effect of Irradiation on the Valence State of Nitrates-of-Plu-
tonium-Solutions (Vliyaniye izlucheniya na valentnoye sostoyaniye
plutoniya v azotnokislykh rastvorakh).

PERIODICAL: Atomnaya Energiya, 1956 No 2, pp. 154-160 (USSR).

ABSTRACT: The investigations were conducted with 0,3 to 2,0 molar nitrates-of-
plutonium solution as well as with 0,3 molar nitric acid, which con-
tained different concentrations of $UO_2(NO_3)_2$ and $K_2Cr_2O_7$.
An X-ray tube (50 kV, 200 mA) was employed as radiation source. The
temperature of the liquids was controlled by a thermocouple. The do-
simetric quantity, which was used to irradiate the liquids, was de-
termined with the help of a ferrous sulfate-dosimetric method. The
doses used were between $5 \cdot 10^{16}$ to $9 \cdot 10^{16}$ eV/cm³.sec.
The valence states of Pu were determined from the common pairs of
 $PuO_2^+ + PuO_2^{++}$ and $Pu^{+3} + Pu^{+4}$.
An irradiation of nitrates-of-plutonium-solutions, which contain no
 $UO_2(NO_3)_2$, causes only an oxidation of plutonium. The intensity of
the oxidation decreases with an increasing concentration of the NO_3^-

Card 1/2

The Effect of Irradiation on the Valence State of Nitrates-of-Plu= 89-2-7/35
tonium-Solutions.

ions and of the acidity. The assumption is pronounced, that the oxidation is caused by the OH - radicals. In the presence of $UC_2(NO_3)_2$ a reduction of plutonium occurs on certain conditions, which is caused apparently not by the atomic hydrogen, but by the UC_2 -ions. An addition of potassium bichromate has an accelerating effect on the radiation oxidation of plutonium. On certain experimental conditions, however, an addition of $K_2Cr_2O_7$ does not prevent the reduction of plutonium.

There are 2 figures, and 15 references, 4 of which are Soviet.

SUBMITTED: April 23, 1957.

AVAILABLE: Library of Congress.

Card 2/2

1. Plutonium nitrates-Effect of irradiation 2. Radiation-Chemical effects

AUTHOR:

Modvedovskiy, V. I.

76-32-4-33/43

TITLE:

The Simultaneous Polarographic Determination of Oxygen and Hydrogen Peroxide in the Process of Their Formation Under the Influence of Irradiation (Odnovremennoye polyarograficheskoye opredeleniye kislороda i perekisi vodoroda v protsesse ikh obrazovaniya pod deystviyem radiatsii)

PERIODICAL:

Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 4, pp. 932-934 (USSR)

ABSTRACT:

The application of the polarographic method was independent of the present work simultaneously proposed by V. I. Veselovskiy et al. (Ref 1), with the difference that the latter used the anodic polarographic determination with rotating platinum electrode and the former the cathodic polarographic determination with dropping mercury electrode. In principle the technique of measurements consists of the fact that after a certain energy absorption by the solution the function diagrams of the current are incorporated by the potential without interrupting radiation, and that from this the concentration of hydrogen peroxide is determined. However, no linear function as mentioned in references was found here. In order to make

Card 1/2

The Simultaneous Polarographic Determination of Oxygen and Hydrogen Peroxide in the Process of Their Formation Under the Influence of Irradiation 76-32-4-33/43

possible the simultaneous determination of oxygen and hydrogen peroxide as function of the amount of absorbed energy an apparatus was constructed which consists of one cell with two capillaries to the mercury inlet, with two potentials being connected according to the reduction of oxygen or hydrogen peroxide respectively. In the present case 0,6 and 1.4-1.6 Volt were used with the different concentrations of sodium nitrate. The data of hydrogen peroxide- and oxygen formation obtained by this method as well as their classification are mentioned in another paper (Ref 4). The method not only makes possible the determination of the changes of concentrations but also data on their nature, as there is the occurrence of molecular oxygen in the decay of hydrogen peroxide. There are 3 figures and 4 references, 3 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii, Moskva (Moscow Institute for Physical Chemistry AS USSR)

SUBMITTED: May 15, 1957

AVAILABLE: Library of Congress

Card 2/2

1. Oxygen--Determination 2. Hydrogen peroxide--Determination
3. Polarographic analysis--Applications 4. Radiation--Chemical effects

AUTHORS: Artyukhin, P. I., Gel'man, A. D., SOV/20-120-1-25/63
Medvedovskiy, V. I.

TITLE: Investigation of the Redox Potentials of Plutonium in Nitric Acid (Issledovaniye okislitel'no-vosstanovitel'nykh potentsialov plutoniya v azotnoy kislote)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 1, pp. 98-100 (USSR)

ABSTRACT: The authors determined the formal redox potentials of various plutonium pairs in nitric acid solutions of different concentrations, as well as the disproportionating of Pu (IV) in nitric acid solutions. The potentials of the pair Pu(IV) - Pu(III) were measured at 25° in a carefully purified nitrogen atmosphere by means of an apparatus already described earlier (Ref 10). These measurements were carried out within the whole range of the ratios of the concentrations of Pu(IV) and Pu(III). The experiments of the direct determination of the potentials of the pairs Pu(VI) - Pu(IV) did not turn out to be successful. The measurement of the formal potentials of the pair Pu(VI) - Pu (IV) was carried out by

Card 1/3

SOV 20-120-1-25/63

Investigation of the Redox Potentials of Plutonium in Nitric Acid

disproportionating of Pu(IV) at low concentrations of nitric acid. This disproportionating of Pu(IV) was carried out at 25°. From the redox potentials measured on conditions of equilibrium and from the values of equilibrium concentrations the formal potentials for the pairs Pu(IV) - Pu(III), Pu(VI) - Pu(IV) and Pu(VI) - Pu(III) are calculated and given in a table. The formal potentials of the pairs Pu(VI) - Pu(IV), Pu(VI) - Pu(III) highly increase with increasing concentration of the hydrogen ions. The potentials of these pairs depend as the fourth power on the concentrations of the ions H^+ . The reactions taking place at the electrode are written down. Using these equations the formal potentials of the pairs Pu(VI) - Pu(IV) and Pu(VI) - Pu(III) in 1 N HNO_3 are calculated. The results obtained agree well with those of other authors. Proceeding from the discussed considerations schemes for the formal potentials of plutonium in nitric acid solutions are proposed and given. A diagram shows the changes of the concentrations of Pu(III), Pu(IV) and Pu(VI) with progressing time in 0,40 N HNO_3 . In spite of the existing complex formation of Pu(IV) the constants of the velocity of the disproportionating of Pu(IV) in nitric acid

Card 2/3